

Client Reference: FP-01019US-DIV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: The Application of

HIROI, et al.

Group Art Unit: 1732

Application No.: **10/758,116**

Examiner: Monica Anne Huson

Filed: January 16, 2004

Confirmation No.: 5010

For: RESIN MOLDED ARTICLES

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. Applicants respectfully request the Examiner return an initialed copy of the enclosed Form PTO-1449 to Applicants with the next Office communication to indicate that the reference(s) has been considered, per MPEP § 609.

This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application on the merits in the present application. No certification or fee is required.

The references were cited in a counterpart Japanese Office Action. An English language version of the Japanese Office Action is attached for the Examiner's information.

English-language Abstracts of the non-English language references are attached hereto, and are relied upon for a statement of relevance for those references. Statements of relevancy are enclosed based on the cited JP references specified in the Office Action.

The following are our comments on the JP references.

**(1) JP 7-205231 A**

JP 7-205231 A discloses a rotatable polygon-mirror produced by injecting a molten resin (80) into a metal mold, which is produced by use of a polygon-mirror

# INFORMATION DISCLOSURE STATEMENT

Appl. No.: 10/758,116 – HIROI et al.

Atty. Docket No.: 041230-0307652

manufacturing apparatus comprising a top-surface formable metal mold (1) for forming a top surface of the polygon-mirror, bottom-surface formable metal mold (3) for forming a bottom surface of the polygon-mirror, a reflecting surface formable metal mold (5) for forming a reflecting surface of the polygon-mirror, a compression piston (7) provided with a resin-pressing surface (6) which specifically presses the molten resin (80) injected into the metal mold to a reflecting-surface forming section (5a) of the reflecting-surface formable metal mold (5), and a center metal mold (8) for retaining the compression piston (7) movably.

The paragraph numbers [0021] to [0023] disclose that when the metal mold (5) moves to a predetermined position, the molten resin (80) is injected into the cavity of the metal mold, the compression piston (7) moves upwardly to press the molten resin in the metal mold in response to the timing of solidifying the injected resin, with contacting the inclined resin-pressing surface of the compression piston with the reflector-forming section, to avoid the formation of sink or sink mark in the cooling process and the formation of concave in the reflector. Figs. 1-7 show an inclined surface between the reflector-forming section and the central boss with increasing the thickness in the outer direction.

## **(2) JP 7-329103 A**

The JP 7-329103 A discloses the injection-pressing molding process comprising: setting a metal insert in a cavity, closing a metal mold comprising a movable die and a fixed die with displacing the movable die to a given distance from a predetermined position which forms the configuration of the final molded article as a pulley in a backward direction, injecting a molding material into a cavity formed by the metal mold, and advancing the movable die to the predetermined position in the forward direction to form a resin pulley. The metal insert is disposed inside the bore of the boss. The invention inhibits the decrease of the weld-strength of the molded pulley.

## **(3) JP 2001-108066 A**

JP 2001-108066 A discloses a rotation driving member which comprises a shaft-mounting section to be mounted with a rotatable shaft, an outer peripheral section formed at the outside of the shaft-mounting section in the circular form, and a disk section connecting the outer peripheral section and the shaft-mounting section, and which transmits a rotation driving force between the shaft-mounting section and the outer peripheral section, which further provides with a rigid or stiffening section having a uniform sectional configuration in the circumferential direction, wherein the rigid or stiffening section has a cavity or bore inside thereof where the thickness is increased than that of the disk section at a joining part between the shaft-mounting section and the disk section or a joining part between the outer peripheral section and the disk section.

INFORMATION DISCLOSURE STATEMENT

Appl. No.: 10/758,116 – HIROI et al.

Atty. Docket No.: 041230-0307652

Respectfully Submitted,

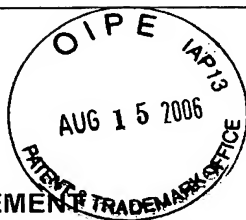
**PILLSBURY WINTHROP SHAW PITTMAN  
LLP**

A handwritten signature in black ink, appearing to read "E. Rico Hernandez", is positioned above a horizontal line.

E. Rico Hernandez  
Registration Number 47,641  
Customer Number: 00909

Date: August 15, 2006  
Telephone: (703) 770-7900  
Facsimile: (703) 770-7901  
P.O. Box 10500  
McLean, VA 22102

FORM PTO-1449 (modified)  
To: U.S. Department of Commerce  
(PW FORM PAT-1449)  
Patent and Trademark Office



Atty. Dkt. No.	M#	Client Ref.
	041230-0307652	FP-01019US-DIV

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

Applicant: Kiyofumi HIROI, et al.
Appln. No.: 10/758,116
Filing Date: January 16, 2004
Examiner: Huson, Monica A. Group Art Unit: 1732

Date: August 15, 2006 Page 1 of 1

**U.S. PATENT DOCUMENTS**

Examiner's Initials*	Document Number	Date MM/YYYY Y	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR					
	BR					
	CR					
	DR					
	ER					
	FR					
	GR					
	HR					

**FOREIGN PATENT DOCUMENTS**

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
	IR 07-205231	08/1995	JAPAN	MASATO, et al.	x			
	JR 07-329103	12/1995	JAPAN	ATSUSHI, et al.	x			
	KR 2001-108066	04/2001	JAPAN	KOICHI	x			
	LR							
	MR							
	NR							
	OR							
	PR							
	QR							
	RR							

**OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)**

SR	JP Office Action of Application 2001-236360 dated May 18, 2006			x	
TR					
UR					
VR					
WR					
XR					

Examiner Date Considered:

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.